

Listing of Claims

The following list of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method of removal of abnormal infective prion proteins associated with transmissible spongiform encephalopathies (TSEs) from an aqueous liquid wherein the aqueous liquid contains a blood plasma product derived from plasma, which method consists essentially of passing the aqueous liquid containing the blood plasma product through a depth filter formed of a matrix comprising (a) a binder and (b) kieselguhr or perlite particles or mixtures thereof and having a pore size providing a retention less than 6 μm , and so removing abnormal infective prion proteins which may be present in the blood plasma product contained within the aqueous liquid such that the aqueous liquid is non-infective with respect to prion protein infectivity, wherein the aqueous liquid is a blood plasma product derived from plasma.

2. (Canceled)

3. (Previously Presented) The method according to claim 1, wherein the binder is cellulose.

4-5. (Canceled)

6. (Previously Presented) The method according to claim 1, carried out in the absence of cationic or anionic charged material.

7. (Previously Presented) The method according to claim 1 carried out at a pH in the range 4 to 10.

8. (Previously Presented) The method according to claim 1, wherein the pore size is in the range 0.6 to 6 microns.

9. (Previously Presented) The method according to claim 1, wherein the pore size is in the range 0.6 to 1.5 microns.

10. (Previously Presented) The method according to claim 1, wherein the depth filter has a thickness of 2 to 5 mm.

11. (Canceled)

12. (Previously Presented) The method according to claim 1, wherein the plasma is human plasma.

13. (Previously Presented) The method according to claim 12, wherein the blood plasma product is selected from the group consisting of albumin, an immunoglobulin, Factor IX, thrombin, fibronectin, fibrinogen, Factor VIII, Factor II, Factor VII, Factor IX, and Factor X.

14. (Canceled)

15. (Previously Presented) The method according to claim 1, wherein the aqueous liquid comprises a product selected from the group consisting of heparin and hormones.

16. (Previously Presented) The method according to claim 1, wherein the abnormal infective prion protein is associated with conditions selected from the group consisting of Creutzfeldt-Jakob Disease, variant Creutzfeldt-Jakob Disease, bovine spongiform encephalopathy and scrapie.

17-24. (Canceled)

25. (Previously Presented) The method according to claim 1, wherein the blood plasma product is selected from the group consisting of immunoglobulins and albumin.

26-27. (Canceled)

28. (Previously Presented) The method of claim 1, wherein the filter is pretreated with ethanol.

29-30. (Canceled)

31. (Currently Amended) A method of removal of abnormal infective prion proteins associated with transmissible spongiform encephalopathies (TSEs) from [[a]] an aqueous plasma fraction, wherein the which method consists essentially of passing the aqueous plasma fraction through a depth filter formed of a matrix comprising (a) a binder and (b) kieselguhr or perlite particles or mixtures thereof and having a pore size providing a retention less than 6 μm , and so removing abnormal infective prion proteins which may be present in the aqueous plasma fraction such that the plasma fraction is non-infective with respect to prion protein infectivity.

32. (Previously Presented) The method of claim 1, wherein the depth filter has a permeability of 110 or 220 L/m²/min.

33. (Previously Presented) The method of claim 1, wherein the depth filter is a single use filter.

34. (Previously Presented) The method of claim 1, wherein the aqueous liquid is a cell-free blood plasma product.

35. (Currently Amended) The method of claim 31, wherein the aqueous plasma fraction consists essentially of contains a protein selected from the group consisting of immunoglobulins and albumin.

36. (Previously Presented) The method of claim 31, wherein the depth filter is pretreated with ethanol.

37. (Previously Presented) The method of claim 31, wherein the depth filter is a single use filter.

38. (Previously Presented) The method of claim 1, wherein the pore size is more than a pore size that is too small to allow passage of plasma proteins and the depth filter is a single use filter.

39. (Previously Presented) The method of claim 1, wherein the blood plasma product derived from plasma passes through the depth filter.

40. (New) A method for the removal of abnormal infective prion proteins associated with a transmissible spongiform encephalopathy (TSE) from an aqueous blood plasma product, consisting essentially of passing the aqueous blood plasma product through a depth filter,

wherein the depth filter has a pore size of 6 µm or less and comprises a binder and solid particles of porous material selected from the group consisting of kieselguhr, perlite and mixtures thereof,

thereby removing abnormal infective prion proteins from the aqueous blood plasma product and rendering the aqueous blood plasma product non-infective with respect to prion protein infectivity.

41. (New) The method of claim 40, wherein the abnormal infective prion proteins are associated with a TSE selected from the group consisting of bovine spongiform encephalopathy, Creutzfeldt-Jakob disease, variant Creutzfeldt-Jakob disease and scrapie.

42. (New) The method of claim 40, wherein the blood plasma product is derived from human plasma.

43. (New) The method of claim 40, wherein the blood plasma product is a plasma fraction.

44. (New) The method of claim 40, wherein the blood plasma product is free of cationic or anionic charged material.

45. (New) The method of claim 40, wherein the blood plasma product is a cell-free

blood plasma product.

46. (New) The method of claim 40, wherein the blood plasma product comprises a biologically active protein.

47. (New) The method of claim 46, wherein the biologically active protein is selected from the group consisting of albumin, Factor II, Factor VII, Factor VIII, Factor IX, Factor X, fibrinogen, fibronectin, heparin, hormones, immunoglobulins and thrombin.

48. (New) The method of claim 46, wherein the biologically active protein is selected from the group consisting of albumin and immunoglobulins.

49. (New) The method of claim 46, wherein more than 90% of the biologically active protein is retained in the aqueous blood plasma product upon passing the aqueous blood plasma product through the depth filter.

50. (New) The method of claim 40, wherein the depth filter is a neutral filter.

51. (New) The method of claim 40, wherein the depth filter is a single-use filter.

52. (New) The method of claim 40, wherein the depth filter is pretreated with ethanol.

53 (New) The method of claim 40, wherein the depth filter has a pore size in the range of 0.6 to 6.0 microns.

54. (New) The method of claim 40, wherein the depth filter has a pore size in the range of 3.5 to 6.0 microns.

55. (New) The method of claim 40, wherein the depth filter has a pore size in the range of 0.6 to 1.5 microns.

56. (New) The method of claim 40, wherein the depth filter has a thickness in the range of 2 to 5 mm.

57. (New) The method of claim 40, wherein the depth filter has a permeability in the range of 110 to 220 L/m²/min.

58. (New) The method of claim 40, wherein the binder is cellulose.

59. (New) The method of claim 40, wherein the solid particles of porous material comprise a mixture of kieselguhr and perlite particles.

60. (New) The method of claim 40, wherein the method is carried out under non-denaturing conditions.

61. (New) The method of claim 40, wherein the method is carried out at a pH in the range of 4 to 10.

62. (New) The method of claim 40, wherein the method is carried out at a pH in the range of 6 to 8.

63. (New) The method of claim 40, wherein the method is carried out at a temperature in the range of -5 to 20 degrees Celsius.

64. (New) A method for the removal of abnormal infective prion proteins associated with a transmissible spongiform encephalopathy (TSE) from an aqueous blood plasma product, consisting essentially of passing the aqueous blood plasma product through a neutral depth filter, wherein the depth filter has a pore size of 0.6 to 1.5 µm and comprises a cellulose binder and a mixture of kieselguhr and perlite particles,

thereby removing abnormal infective prion proteins from the aqueous blood plasma product and rendering the aqueous blood plasma product non-infective with respect to prion protein infectivity.